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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
ELALLAM, AHMED	
ART UNIT	**PAPER NUMBER**
2662	4

DATE MAILED: 07/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/668,696	BERGER ET AL.	
	Examiner	Art Unit	
	AHMED ELALLAM	2662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 April 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6,8-10 and 13-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6,8-10 and 13-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 26-28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In claim 26, the feature of "the controller is a base band controller coupled to a digital signal processor to provide a voice path and a broadband interface to provide a data path" is new subject matter, because in the base claim 1, a hub a controller and routing device were already recited, in accordance with the wire-line embodiment of figure 4. However adding the elements of the wireless embodiment of figure 5 to the element of figure 4 was not described in the specification as originally filed.

Regarding claim 27, in addition to the above remarks, the feature of "RF port and antenna for wireless communication" is subject to similar remarks as indicated above with reference to claim 26.

Regarding claim 28, claim 28 depends from claim 26, thus it is subject to the same rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-4, 8, 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Storch et al US (6,307,853) in view of Wellard et al, US 6,510,219) and further in view of Forslow, US 20030039237.

Regarding claim 1, with reference to figure 6, Storch discloses a communication system configured for routing calls from terminals 150 to PSTN 200 or WIDE AREA DATA NETWORK 300 (WADN) comprising:

A PBX in combination with the TDR 402, the PBX in communication with at least PSTN or WADN, (reads on a hub in communication with at least one circuit switched channel, at least one packet switched channel, and a plurality of user devices);

A TDR 402 (telephony-to-data re-routing system), comprising an inbound interface (processor) that determines that the call should be re-routed back through the PBX 401 to the PSTN 200 or to the WADN. See column 8, lines 25-45. (Reads on a

controller operable to select one of the circuit switched channel and the packet switched channel for connection with one of the user devices), (Examiner interpreted the combination of the PBX and the TDR as being the claimed the hub).

The PBX is programmed to route calls to TDR 402 or PSTN, see column 5, lines 4-9. (Reads on routing device operable to route the call from the user devices to the selected channel).

Storch does not disclose dynamic switching between packets switched and circuit switched channel.

However, Wellard discloses in the same field of endeavor dynamic switching of the same call between circuit-switched and packet switched channel. See column 2, lines 59-67 and column 3, lines 1-15.

Therefore, it would have been obvious to an ordinary person of skill in the art, at the time the invention was made to provide the method/system of Storch with the dynamic switching feature of Wellard so that a good quality of service for the call can be maintained.

Willard does not disclose that switching calls among the circuit switched channel and packet channel is based on call priority. (Claimed the controller is configured to switch a low priority call from the circuit switched channel to the packet switched channel so that the circuit switched channel is available for the high priority call).

However, Forslow discloses with reference to figures 2 and 8, switching between circuit switched and packet channel based on call priority. See figure 8 step 86, paragraphs [0068], [0070] and claim 3.

Therefore, it would have been obvious to an ordinary person of skill in the art, at the time the invention was made to make the QoS based dynamic switching of Willard implement the QoS call priorities taught by Forslow implemented in the TDR 402 of Storch so that rerouting of Storch can implement dynamic QoS based priorities.

Regarding claim 2, Storch discloses that the PBX can be configured to attempt a call to the PSTN 200, determine that the call receiver's telephone device 160 is not available (e.g., busy or no answer telephony condition), and only then re-route the call over the WAN 300. See column 7, lines 3-7. (Reads on the controller is configured to select the circuit switched channel if available).

Regarding claim 3, Storch discloses the TDR can be configured to select the channel based on cost of the call. See column 3, lines 1-9.

Regarding claim 4, Storch discloses that channel selection can be based on the status of the user placing the call. See column 7, lines 41-48.

Regarding claim 8, with reference to figure 3, Storch discloses that telephone devices can be any telephone devices, including telephones, fax machines, and video workstations.

Regarding claim 29, Examiner interpreted the combination of the PBX and the TDR of Storch as being the claimed hub.

Regarding claim 30, the TDR (claimed controller is within the combination of the PBX and TDR. (Claimed the controller is located in the hub.

3. Claims 5, 6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Storch/Willard in view of Forslow as applied to claim 1 above and further in view of Regnier, US (6,345,047).

Regarding claims 5 and 6, Storch/Willard/Forslow discloses substantially all the limitations of the parent claim 1; except it doesn't discloses that the communication media for the PSTN and data channels is an XDSL line.

However, with reference to figures 13 and 14, Regnier in the same field of endeavor, discloses an XDSL line in connection with C.O (Central office) from a plurality of users (370, 350).

Therefore, it would have been obvious to an ordinary person of skill in the art, at the time the invention was made to enable the users of Storch to be connected to the PBX using the XDSL line of Regnier so that higher bandwidth can be provided to the system of Storch.

Regarding claim 10, Storch/Willard/Forslow discloses substantially all the limitations of the parent claim 1, except they don't disclose that a user device is configured to utilize voice over Internet protocol.

However, with reference to figure 14, Regnier discloses in the same field of endeavor, a method/and or system in which a computer implementing VoIP protocol is used in an environment implementing alternate routing. See column 8, lines 35-35-67.

Therefore, it would have been obvious to an ordinary person of skill in the art, at the time the invention was made to enable the users devices of Storch/Willard/Forslow

to have the VoIP feature taught by Regnier so that long distance calls can be carried out using the Internet.

4. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Storch/Willard in view Forslow as applied to claim 1 above and further in view of Haskal, US 2001/0036172.

Regarding claim 9, Storch/Willard/Forslow disclose substantially all the limitations of the parent claim 1, except they don't disclose that the Storch device is a wireless device.

However, with reference 3, Haskal discloses a communication system implementing alternate routing in which a wireless user device 116 is used.

Therefore, it would have been obvious to an ordinary person of skill in the art, at the time the invention was made to enable the system of Storch/Willard/Forslow to use the wireless alternate routing method/system taught by Haskal so that alternate routing based QoS priorities can be implemented to wireless devices.

5. Claims 13, 14, 22, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Storch et al US (6,307,853) in view of Wellard et al, US 6,510,219) and further in view of Golka et al, US (6,507,648).

Regarding claim 13, with reference to figure 6, Storch discloses a communication system configured for routing calls from terminals 150 to PSTN 200 or WIDE AREA DATA NETWORK 300 (WADN) comprising:

Receiving a call request at PBX in communication with at least PSTN or WADN, see column 5, lines 22-52. (Reads on receiving a call request at a communication system coupled to at least two circuit switched channels and at least one packet channel), (Examiner interpreted the PBX interfacing the PSTN as being the claimed communication system coupled to at least two circuit switched channel, because a plurality of circuit channel are served by the PBX);

A TDR 402 (telephony-to-data re-routing system), comprising an inbound interface (processor) that determines that the call should be re-routed back through the PBX 401 to the PSTN 200 or to the WADN. See column 8, lines 25-45. (Claimed selecting one of the circuit switched channel and the packet switched channel to connect the call with a telephone network).

Storch does not disclose determining a priority of a user sending a request and the channel selection is based on the priority of the user sending the request and the status of the circuit switched and packet switched channel.

However, Wellard discloses selecting between circuit-switched and packet switched channels. See column 2, lines 59-67 and column 3, lines 1-15. (Claimed channel selection is based on the status of the circuit switched and packet switched channel);

Therefore, it would have been obvious to an ordinary person of skill in the art, at the time the invention was made to provide the TDR of Storch with the teaching of channel availability selection taught by Wellard so that Storch's rerouting decisions of calls would be more reliable.

Golka discloses channel selection is based on the priority of user sending a request. See column 4, line 27-54.

Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made to provide Willard' channel selection depend on call priority as taught by Golka so that rerouting decision of calls by the Storch/Willard's TDR can be carried out based on priority. The advantage would be the provisioning of Stoerch's system with QoS (Quality of Service) based priority access.

Regarding claim 14, Storch discloses that the PBX can be configured to attempt a call to the PSTN 200, determine that the call receiver's telephone device 160 is not available (e.g., busy or no answer telephony condition), and only then re-route the call over the WAN 300. See column 7, lines 3-7. (Reads on selecting the circuit switched channel if available).

Regarding claim 22, Storch doesn't disclose switching from the selected channel to the other of circuit switched channel and the packet switched channel.

However, in addition to the above with reference to base claim 13, Wellard further discloses dynamic switching of the same call between circuit-switched and packet switched channel. See column 2, lines 59-67 and column 3, lines 1-15. (Claimed switching from the selected channel to the other of circuit switched channel and the packet switched channel).

Therefore, it would have been obvious to an ordinary person of skill in the art, at the time the invention was made to enable the system of Storch/Willard/Golka with the

dynamic switching of Wellard so that quality of serviced of Storch/Willard/Golka subscribers can be maintained during changes of network load conditions.

Regarding claim 24, Storch/Willard/Golka do not disclose manual switching from the packet switch channel to the circuit switched channel upon receiving a notification that the circuit switched channel is available.

However, it would have been obvious to an ordinary person of skill in the art at the time the invention is made to make the Storch/Willard/Golka being manual upon receiving a notification of availability of a circuit channel so to reduce the cost that goes along the circuitry needed for the automatic switching.

Regarding claim 25, in addition to the above with reference to base claim 13, Golka further discloses interrupting a lower-priority circuit switched call in the presence of higher priority circuit switched call, see column 4, lines 27-54. (Claimed selecting one of the circuit switched channels based on a request from a low priority user only if the circuit switched channel is not in use). (Examiner interpreted the interruption of lower-priority call as being the granting of low-priority request in the presence of available circuit switched channel).

Therefore, it would have been obvious to an ordinary person of skill in the art at the time the invention is made to implement the teaching Golka of low-priority request access of available circuit switched channel in the channel selection process of Storch/Willard/Golka's system so that low priority users can enjoy the higher quality of circuit switched channel when available. The advantage would be the occasional

provisioning of good quality service to subscribers for a less cost, resulting in keeping these subscribers for longer time in the competitive market.

6. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Storch/Willard/Golka as applied to claim 22 above, and further in view of Forslow US 20030039237.

Regarding claim 23, Storch/Willard/Golka discloses substantially all the limitations of claim 22, except they don't explicitly disclose automatically switching from the circuit switched channel to the packet switched channel when a higher user requests a circuit switched channel.

However, Forslow discloses selecting a circuit switched bearer when receiving a higher QoS call. See paragraph [0070]. (Claimed automatically switching from the circuit switched channel to the packet switched channel when a higher user requests a circuit switched channel).

Therefore, it would have been obvious to an ordinary person of skill in the art, at the time the invention was made to enable the system of Storch/Willard/Golka with the circuit switched preference selection taught by Forslow so that switching circuit channel of Storch/Willard/Golka can be reserved for subscribers to high QoS.

7. Claims 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Storch/Willard in view of Golka as applied to claim 13 above and further in view of Regnier, US (6,345,047).

Regarding claim 15, Storch/Willard/Golka discloses substantially all the limitations of the parent claim 13, except they don't discloses that establishing a voice channel over the packet switched comprises utilizing voice over Internet protocol.

However, with reference to figure 14, Regnier discloses in the same field of endeavor, a method/and or system in which a computer implementing VoIP protocol is used in an environment implementing alternate routing. See column 8, lines 35-35-67.

Therefore, it would have been obvious to an ordinary person of skill in the art, at the time the invention was made to enable the users devices of Storch/Willard/Golka to have the VoIP feature taught by Regnier so that long distance calls can be carried out using the Internet. The benefit would be cost reduction in long distance calls.

Regarding claim 16, Storch discloses the TDR can be configured to select the channel based on cost of the call. See column 3, lines 1-9.

Regarding claim 17, Storch discloses that channel selection can be based on the status of the user placing the call. See column 7, lines 41-48.

Regarding claim 18, Storch/Willard/Golka discloses substantially all the limitations of the parent claim 13, except they don't disclose notifying a user when a circuit channel becomes available.

However, it would have been obvious to an ordinary person of skill in the art, at the time the invention was made to implement circuit switched availability in Storch' system so that Storch users will have the option of either continuing the calls on the packet switched network or switch to PSTN circuit for better service quality.

Regarding claims 19 and 20, with reference to figure 3, Storch discloses that telephone devices can be any telephone devices, including telephones, fax machines, and video workstations.

8. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Storch/Willard in view Golka as applied to respective 13 above and further in view of Haskal, US 2001/0036172.

Regarding claim 21, Storch/Willard/Golka discloses substantially all the limitations of the parent claim 13, except it does not disclose that the user device is a wireless device.

However, with reference 3, Haskal discloses a communication system implementing alternate routing in which a wireless user device 116 is used.

Therefore, it would have been obvious to an ordinary person of skill in the art, at the time the invention was made to enable the system of Storch/Willard/Golka use the wireless alternate routing method/system taught by Haskal so that alternate routing based QoS priorities can be implemented to wireless devices.

Response to Arguments

The objections to the specification and to claim 7 are withdrawn in view of the Amendment.

9. Applicant's arguments with respect to claims 1-6, 8-1013-30 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure Smyk US (6,597,686).

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AHMED ELALLAM whose telephone number is (703) 308-6069. The examiner can normally be reached on 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kizou Hassan can be reached on (703) 305-4744. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AHMED ELALLAM
Examiner
Art Unit 2662
June 21, 2004

JOHN PEZZLO
PRIMARY EXAMINER